

AMENDMENTS TO THE DRAWINGS

Please replace FIG. 5 with the attached FIG. 5.

Attachment: 1 replacement sheet

REMARKS/ARGUMENTS

Applicants would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office Action. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments made herein.

Drawings

FIG. 5 has been amended to include the prior art designation.

Specification

The parts of the description that the Examiner objected to were corrected to resolve the informalities.

The abstract has been amended so that legal phraseology is avoided.

Claim Objections

Claims 1 and 2 were objected to for containing informalities. These informalities have been resolved with the amendments made herein. Withdrawal of this objection is requested.

35 USC § 112

Claims 1-5 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The claims have been amended herein in accordance with the Examiner's suggestions. Withdrawal of this rejection is respectfully requested.

35 USC § 103

Claims 1-5 were rejected under 35 U.S.C. § 103 as being unpatentable over the applicant's admitted prior art (hereinafter "AAPA") in view of JP 8-155881 (hereinafter "Nakano"). For at least the following reasons, the Examiner's rejection is respectfully traversed.

In regard to independent claim 1, the combination of the references cited does not disclose "a rotary pipe shaft for holding the wire feed device on the robot main body such that the wire feed device is rotated on the rotation surface thereof extending substantially in the same

direction as a feeding direction of the welding wire.” Although a cable 10 is guided through a guide tube 22, the guide tube 22 does not hold a wire feed device on a robot main body in such a manner that the wire feed device can be rotated on the rotation surface thereof extending substantially in the same direction as a feeding direction of the welding wire. For the rotating surface in which the guide tube 22 rotates to extend in substantially the same direction as the feeding direction of the welding wire, the rotating surface of the embodiment shown in FIG. 1 of Nakano would have to be a substantially vertical plane. However, the rotating surface of the guide tube 22 appears to be horizontal and, therefore, the combination does not disclose the limitation as recited in claim 1.

Further, as described in the specification of the present application, in a conventional arc-welding robot, the connection cables/hoses are swung around due to a posture of the robot main body and swing movement of a wire feeding device. This causes interference with external equipment and is damaged, or it requires extra mounting space for sufficiently taking a distance between the external equipment and the robot main body to avoid interference. The arc-welding robot, as claimed, avoids interference of the connection cables/hoses with external equipment. Specifically, the cable wire/hose passes through the inside of the robot main body. In contrast, the AAPA discloses a connection cable/hose 109 that is exposed to the outside, as apparent from Fig. 5. There is no disclosure, teaching, or suggestion to pass the connection cable/hose 109 through respective insides of the rotation pipe shaft/robot main body and arrive at the base portion to avoid interference. In Nakano, a variety of hoses 8 for tools are guided into a guide tube 22 through which a base 1 and a swing portion 2 pass. However, as apparent from Fig. 1, the variety of hoses 8 for tools are exposed to an outside until they arrive at the guide tube 22. There is nothing in Nakano that discloses, teaches, or suggests that interference is avoided by having them passed through an inside of a first arm. Additionally, in Nakano, a cable 10 is passed through an inside of the first arm, but there is no feeding device. Thus, Nakano fails to disclose, teach, or suggest having the cable passed through an inside of a rotation pipe shaft holding the feeding device and guiding the cable into a guide tube through which the base and the swing portion pass.

For at least the reasons discussed above, the combination of AAPA and Nakano fails to teach or suggest each and every limitation set forth in claim 1. Accordingly, AAPA and Nakano

cannot render obvious claim 1, or claims 2-5, which depend therefrom. Withdrawal of this rejection is respectfully requested.

In light of the foregoing, it is respectfully submitted that the present application is in condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. 39700.

Respectfully submitted,
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